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ABSTRACT

This article reviews the progress made in meeting United States' existing mental health goals for adolescents, and identifies issues that will have to be considered in setting new goals. The article examines the substantial need for child mental health services, particularly among young, socioeconomically disadvantaged youth. The unmet need for services is also described within the framework of children involved in various social service systems. To assist in the delivery of mental health services, a theoretical model guiding emerging policy is described, which addresses access, managed care, sector shifting, ethnic patterns, child and family factors, quality of care, service integration, and outcomes. Finally, recommendations are offered for improving the targeted goals for Healthy People 2010 in the following three areas: (1) improve the transfer of technology for delivering psychotherapeutic interventions in community-based settings; (2) question the current models of delivering psychotherapy by practitioners who are generalists; and (3) examine alternative financing structures for the delivery of care within primary health care, education, and other sectors. Three strategies for setting goals are suggested: (1) set goals for communities rather than at national levels; (2) set up a national surveillance system to monitor implementation on an annual basis; and (3) establish an incentive system. Contains approximately 150 references. (SD)

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CHAPTER 5 •

Mental Health Services for Children and Adolescents

MARY JANE ROTHERAM-BORUS

Policymakers have motivated the nation to address children's mental health needs by setting a series of goals for communities (Fleming, 1996; U.S. Department of Health and Human Services, Public Health Service [DHHS], 1991, 1995). These goals have included reducing the prevalence of psychiatric disorder, increasing the delivery of mental health services, and targeting specific problems, such as reducing the prevalence of suicidal behaviors, physical fighting, weapons possession, and the high school drop-out rate. Many of these goals will not be met by the year 2000; in fact, the mid-decade review acknowledges that some adolescent mental health problems are becoming worse (e.g., the increasing rate of suicide attempts) (DHHS, 1995; Fleming, 1996). This chapter will review the progress on meeting the nation's existing mental health goals for adolescents and identify issues that will have to be considered in setting new goals. To assist in the process, it will be necessary to identify a theoretical model guiding emerging policy issues that will influence our ability to achieve substantial changes in children's mental health problems (e.g., the increase of managed care, categorical funding) and to provide recommendations to understand factors that are likely to shape how communities can set new, realistic, and achievable goals for the year 2010.

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Significance and Scope of the Problem

Need for Services

A substantial number of children need mental health services; therefore, 10 years ago we set a national goal to reduce the need for mental health services to 10% of children (DHHS, 1991; revised to 17% in 1995, DHHS, 1995). When the goal was set, there were no national data documenting the need for services. The presence of a psychiatric disorder is one traditional index of need. In 1989, it was estimated that 7.5 million children (12% of the child population) were in need of mental health services based on the presence of a mental disorder (U.S. Congress, Office of Technology Assessment, 1986).

In contrast to this estimate, substantially higher rates of psychiatric disorder consistently emerge in nonclinical samples of children assessed by different investigators using various assessment methods (Anderson, Williams, McGee, & Silva, 1989; Bird et al., 1988; Brandenburg & Friedman, 1990; Costello et al., 1988; Offord et al., 1987; Velez, Johnson, & Cohen, 1989). Between 17.6% and 22% of children in nonclinical settings are reported to have one or more psychiatric diagnoses, a rate similar to that obtained in the recent Methodology for Epidemiology in Children and Adolescents (MECA) trial (21%) (Lahey et al., 1994). About twice this percentage are anticipated to be subsyndromal for disorder (Angst & Hochstrasser, 1994; Judd, Rapaport, Paulus, & Brown, 1994), that is, at higher risk for developing mental health problems in the future and more likely to have a cluster of risk factors (Institute of Medicine, 1994). Children with more than one disorder are particularly likely to follow a negative developmental

course, with increasing mental health problems with age (Coie et al., 1993; Lewinsohn, Rohde, & Seeley, 1995). As the overall rate of psychopathology is similar across these studies, so also are the rates of specific diagnoses, such as attention deficit hyperactivity disorder (ADHD) (4.2%), oppositional disorder (6.3%), conduct disorder (3.7%), and the combined externalizing behavior disorders (10.4%). Anxiety and depressive disorders rates are also similar across studies, 13.6% and 6.2%, respectively. These data support the assertion that mental illness is the number one cause of disabilities for those aged 10-18 years (National Institute of Child Health and Human Development, 1990). However, the data suggest that the goal of a 17% rate of psychiatric disorder in children will not be met by the year 2000 for specific subgroups (low income, ethnic minority children) and must be reexamined for feasibility and relevance for the year 2010.

One area that leads to reexamination of the goals is the dramatic gender and age differences found in the rates of psychopathology. Overall, young males have higher rates of disorder than young females and are more likely to have a disruptive behavior diagnosis (Bird et al., 1988). Males and females report similar rates of disorder in adolescence; however, the type of disorder varies. Affective disorders are far more common among adolescent females than males (Berman & Schwartz, 1990; Costello, 1989; Lewinsohn et al., 1995). There are a few studies of ethnic differences (including the MECA data set), but the data gathered are highly variable. Ethnic differences in scores of a single dimension of adjustment (e.g., depression) have been assessed (Reynolds & Graves, 1989); however, a national study of ethnic differences in need for mental health services is only currently being conducted (Utilization, Needs, Outcomes, and Costs for Child and Adolescent Psychopathology, or UNOCCAP), and the results will take several years to emerge. Socioeconomic status and community factors appear to influence rates significantly (Swanson, Holzer, & Ganju, 1993), with poverty increasing risk for a mental disorder.

To set a national goal, the definition of need for mental health, particularly among youth in disadvantaged socioeconomic groups and ethnicities, must be examined. In addition to psychiatric disorder, the functional impairment and adaptive functioning of children must be assessed to determine need for services (Halfon, English, Allen, & DeWoody, 1994). Children who are experiencing symptoms may or may not demonstrate functional

impairments in daily life (Berman & Jobes, 1995; Berman & Schwartz, 1990). Given past research, about 40% of adolescents and children are believed to have a mental health disorder currently or in the past, or be subsyndromal for disorder (D. P. Cantwell, personal communication, June 18, 1994). These youth can be considered at high risk for multiple negative outcomes: dropping out of school, having contact with the criminal justice system, pregnancy and teenage motherhood, substance abuse, HIV infection, and unemployment. If 40% of the nation's children are at risk, a review of fundamental structural factors that shape mental health and our definitions of national goals may need to be readjusted.

Unmet Need for Services

Given the number of youth at risk, the number of children whose needs are being addressed by community service systems is low. When setting goals for the year 2000, the nation recognized that only one in eight young people who needed services actually received those services. Currently, while 20% to 40% of youth have a need for mental health services (based on MECA data) about 3% to 33% of youth receive such care (U.S. Congress, Office of Technology Assessment, 1986), between 3.5% and 6% of young people (Manderscheid et al., 1993). As increasing fiscal pressures are placed on community service providers, the percentage of youth who receive services appears to be decreasing, not increasing.

One major caveat exists in our evaluation of our ability to assess the mental health services provided to children. Children with mental health problems are more likely to present in special education, foster care, primary health care, the juvenile justice system, and substance abuse treatment than in the mental health system. Between 8% and 12% of schoolchildren are in special education classes, and almost half of those in special education are likely to have mental health problems (Knoff & Batsche, 1990; Sailor, Gerry, & Wilson, 1991; Urban Strategies Council, 1992). Children with mental disorders are more likely than their peers to seek care in primary health care settings (Costello et al., 1988; Horwitz, Leaf, Leventhal, Forsyth, & Speechley, 1992; Miranda, Hohmann, Atkisson, & Larson, 1994), although most receive help only from their doctor, rather than being referred for mental health care (Horwitz et al., 1992). For example, children with untreated mental

health problems are likely to use double the resources in primary health care compared to children without mental health problems (Borus et al., 1985). This trend is likely to increase with the introduction of managed care, reliance on family practitioners, and reductions in spending. For example, child welfare programs (including foster and kinship care, group home, and residential care) serve between 30% and 65% of the children seen in mental health settings (Halfon, 1992; Halfon et al., 1994; Halfon & Klee, 1987; Hochstadt, Jaudes, Zimo, & Schachter, 1987; Schorr, Both, & Copple, 1991; Takayama, Bergman, & Connell, 1994; Weinstein & LaFleur, 1990), often delivering inappropriate, incomplete, and poorly coordinated care (Frank, 1980; Klee & Halfon, 1987). In addition, children of different ethnic groups receive care at very different rates (e.g., 1 of 13 African Americans vs. 1 of 401 Asian Americans) (McGlynn, Norquist, Wells, Sullivan, & Libernian, 1983). Juvenile justice also serves a large portion of children in need of mental health services (e.g., 37%) (Urban Strategies Council, 1992), with the criteria very unclear about who receives mental health care versus probation (Cohen et al., 1990; Elliott, Huizinga, & Menard, 1989; Paulson, Coombs, & Landsverk, 1990). Ethnicity appears to be a primary criteria for triaging youth to one setting or another. In particular, African Americans are far more likely to receive services in the juvenile justice sector when demonstrating the same number of mental health symptoms as Anglo peers being served in the mental health system (Wordes, Bynum, & Corley, 1994). Because most children with mental health problems are comorbid for multiple disorders, many disturbed youth are found in substance abuse programs (Berman & Schwartz, 1990; Brunswick & Menzel, 1988; Friedman, Utada, Glickman, & Morrissey, 1987; Hughes et al., 1990; Mannuzza, Klein, Bonagura, Konig, & Shenker, 1988; Windle, 1990). Finally, adolescent children at risk for mental health problems are far more likely to be identified by social service systems; the kinds of problems these youth can create (theft, teenage parenthood, car accidents, suicide) are of greater concern to society than the types of problems that younger children can create.

Many children served in other sectors are at risk for mental health problems, and these children are often using multiple services, although the pattern of use has not been well documented (Urban Strategies Council, 1992). Clearly, it is critical to understand the

movement of children at risk for mental health problems among the various social service systems and how counties assign responsibility for the care of these children. There will clearly be ethnic-, gender-, and age-specific developmental pathways for youth without mental health problems in the same communities.

Thus, setting national goals for the delivery of services must stop using a sector approach to understanding the delivery of mental health services to children. By setting a goal that targets delivery in only one sector (e.g., more children will receive mental health care in the mental health sector), we fail to recognize the complexity of the problem and of the potential solutions. For example, clearly the easiest route to the delivery of mental health care for children and adolescents will be in the school or primary health care sectors. These sectors must consider their responsibility for achieving the positive, long-term mental health adjustment of children by developing integrated, comprehensive goals that will monitor integrated, comprehensive programs for youth. Considering the issues of pathways to services, it is necessary to examine the entire community service network. Adequate mental health services for children can only be realized when the efforts of multiple service sectors are recognized as interrelated.

Factors Influencing Goals in the Year 2010

Theoretical Model

National goals can only be met at the local level, especially when the goals necessitate the interface of individual children's problems and local-level service provision by therapists in their agency or office.

Thus, multiple factors at multiple levels (e.g., state, county, community, institutional, family, and individual) will influence the nation's ability to meet its health goals. For example, community factors dramatically influence the need and unmet need for mental health services in children (Kelly, 1979; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979). High levels of poverty, overcrowding, crime, and poor housing are associated with high rates of conduct disorder (Hawkins, Catalano, & Miller, 1992; Rutter &

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Giller, 1983). D. P. Cantwell (personal communication, June 18, 1994) estimates a 10-point difference in the mean level of the Children's Global Assessment Scale (CGAS) in children in two adjacent counties in southern California, based on community stressors. Structural, social, and health indicators of the community will be associated with children's need for mental health care. Building on paradigms that have been used to analyze access (Aday & Anderson, 1981) and quality of care (Donabedian, 1980; McGlynn et al., 1983), and economic (Manning, Wells, Duan, Newhouse, & Ware, 1986) and clinical outcomes (Hoagwood, Hibbs, Brent, & Jensen, 1995) in previous mental health services research, an interdisciplinary team of researchers from the University of California, Los Angeles (Rotheram-Borus, Leibowitz, et al., 1994) and a consortium of universities have developed a model (see Figures 5.1 and 5.2) that can be used to examine structural factors at the community and service sector levels that, together with family factors, influence the process and outcomes associated with responding to children's mental health needs. Parallel frameworks have been used to investigate cultural processes (Gallimore, Goldenberg, & Weisner, 1993; Weisner, 1984; Weisner, Gallimore, & Jordan, 1988), developmental processes (Rogoff, 1995; Rogoff, Baker-Sennett, Lacasa, & Goldsmith, 1995), and educational (Artiles & Trent, 1994) and family settings for the developmentally disabled (Gallimore, Tharp, & Rueda, 1989). Figure 5.1 outlines the primary structural factors that influence the delivery and outcomes of care for communities and individuals. In this figure, the system of care refers to structural and family factors affecting need, access, the process of care, and outcomes. Each of these factors must be assessed from multiple perspectives and at multiple levels. In Figure 5.2, access refers to the ability to gain entry to mental health care; utilization refers to the amount of care received (Gillespie & Marten, 1978). Communities vary widely in the degree of integration of their mental health services for disturbed children. For example, in one county in California, all children entering the juvenile justice system are screened for mental health problems; about one third are in need of services, which are paid for by the juvenile justice system. This structural difference in the organization of care is likely to influence access to care and utilization.

In addition to structural features of the organizational setting predicting pathology and associated need for mental health services,

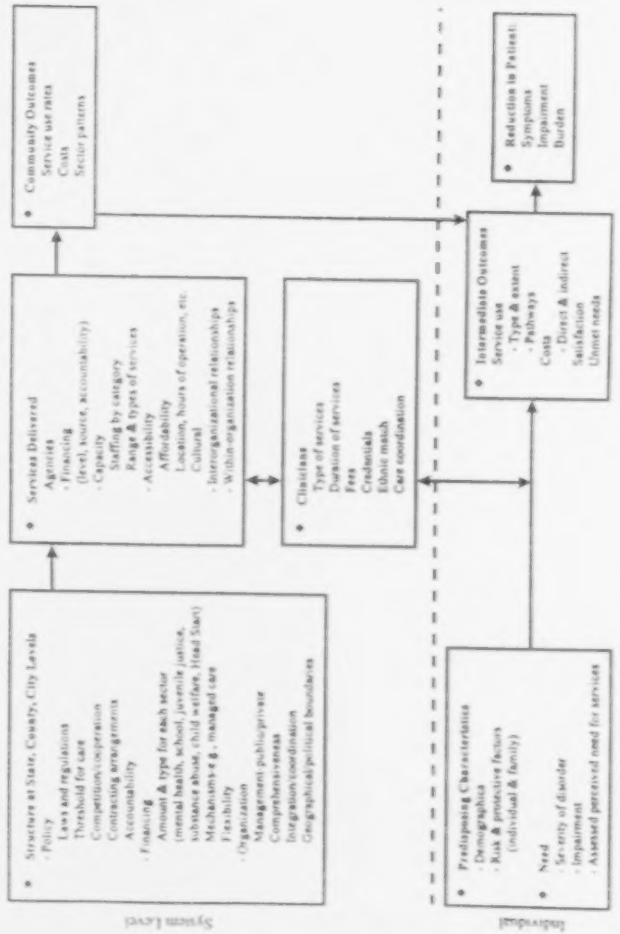

Figure 5.1. Model of a System of Care for Mental Health Services

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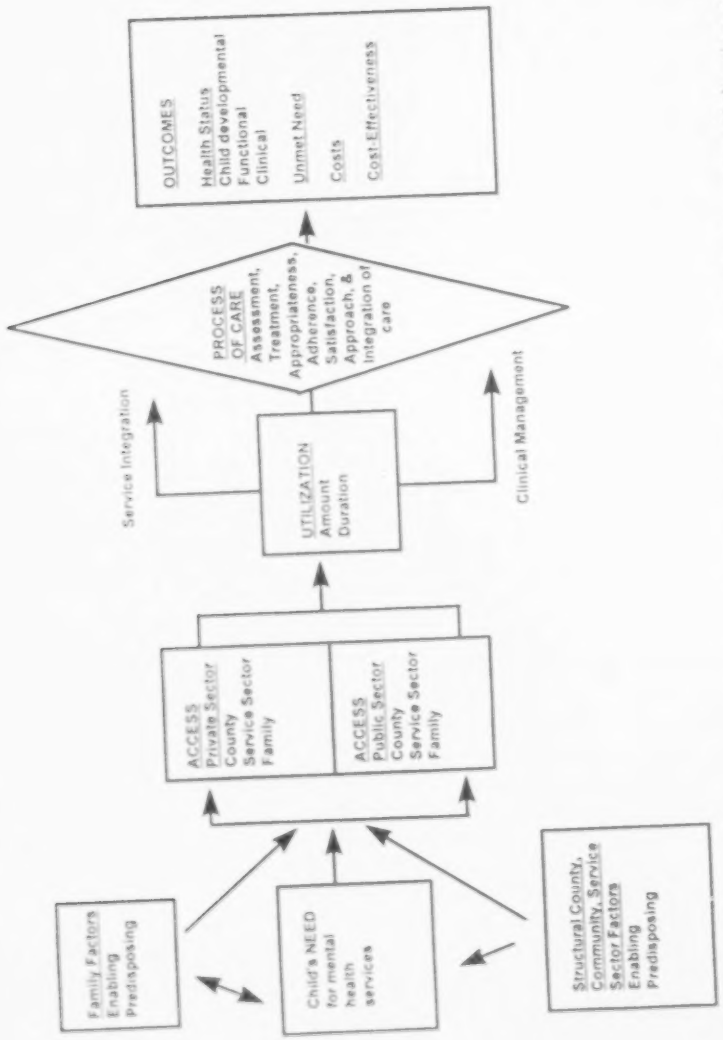

Figure 5.2. Theoretical Model Outlining Sets of Factors Influencing Children's Needs, Access, Utilization, and Outcomes

so do social disadvantage, marital discord, overcrowding or large family size, paternal criminality, maternal mental disorder, family behavioral management practices, and admission into child welfare services (Biederman et al., 1993; Bird, Gould, Yager, Staghezza, & Canino, 1989; Dishion & Loeber, 1985; Hetherington, 1989; Klee & Halfon, 1987; Rutter et al., 1979; Williams, Anderson, McGee, & Silva, 1990). While able to increase children's risk for mental health problems, families can also be protective. Having a small family, with children well spaced; supportive parental (Rutter, 1985) and sibling relationships; and adequate rule setting (Werner, 1986) protects children from disorder. Future national goals must target increases in family protective factors (e.g., alcohol-limited environments for families) and decreases in family-related risk factors (e.g., high rates of out-of-home placements) associated with the need for mental health services (Bird et al., 1989; Blank, Melaville, & Asayesh, 1992; Goldenberg & Gallimore, 1991). Similar to the manner in which we narrowly set a goal for mental health problems to be served by the mental health sector, we must recognize that children's adjustment will be related to environmental issues such as parents' employment and availability of low-cost child care. In addition, parents of different ethnic origins are likely to construct the meaning of their children's mental health symptoms quite differently and have very different thresholds for seeking mental health care for their children. While we need research that generates basic descriptions of the family's influences on the emergence and maintenance of its children's mental health problems (Coie et al., 1993; Hochstadt et al., 1987), we have substantial data to indicate domains that will be useful in shaping our ability to meet the goals of the year 2010.

Figure 5.2 presents the ways factors at multiple levels influence an individual child's access, utilization, quality, outcome, and cost of receiving mental health services. In the proposed theoretical framework, state, county, local community, and family factors affect children's need for mental health services. For example, states that mandate individualized educational plans for children with learning disabilities are more likely to address the needs of young people with these problems compared to states without such mandates. Communities with preventive programs for all students transitioning to middle schools are likely to reduce the number of children needing mental health interventions at these developmental points.

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Communities with a low socioeconomic base and high unemployment are likely to have a higher percentage of children with mental health problems compared to more economically privileged communities. The higher percentage of mental health problems emerge not only because of higher rates of family problems but also because of reduced access and lower levels of funding provided in impoverished settings. In addition to influencing the level of need, both family and structural factors enable or inhibit children's access to mental health care. A non-English-speaking Vietnamese family, for example, may want to seek mental health services, but the community may have no service providers who speak Vietnamese. Even if the family had resources or insurance to pay for services, family (e.g., ethnicity) and community (e.g., percentage of youth receiving care) factors may constrain the delivery of care.

Access. Most of our knowledge of children's access and use comes from studies of adults, but because parents determine their children's use (Rotheram-Borus, Miller, Piacentini, Graae, & Castro-Blanco, 1994), adult data may be informative (Baekeland & Lundwall, 1975). For example, families' insurance significantly influences their access to mental health care; more generous insurance promotes use (Leibowitz, 1986; Manning, Wells, Duan, Newhouse, & Ware, 1984; Miranda et al., 1994) particularly for children and adolescents (Padgett, Patrick, Burns, Schlesinger, & Cohen, 1993). For example, when coverage was free, 8.8% used outpatient services, twice the rate of those who paid for their own care. Use of formal mental health providers was low, but was twice as common when service was free (5% vs. 2.4%), a consistent finding (Frank & McGuire, 1985; McGuire, 1989; Miranda et al., 1994). Despite the large differences in use, there were no significant differences in mental health outcomes (Brook et al., 1983). Private insurance increases the demand for mental health services. This demand can then be satisfied by private providers, unless a family is trying to obtain Medicaid-reimbursed services. Few private providers may be willing to accept the low Medicaid reimbursement rates. The uninsured face even greater constraints on their supply of mental health services because they must depend on the limited supply of public mental health providers. Less is known about how those with public health insurance or no insurance are affected by

the difficulty in finding adequate services, or how private providers substitute for public providers. We do not currently know to what extent families use private insurance or pay out of pocket if they cannot use public mental health services, nor do we know how Medicaid providers' willingness to accept low reimbursement levels affects access to care for poor children.

Managed Care. Prior studies have found that costs of outpatient mental health care for enrollees in health maintenance organizations (HMOs) are lower than for fee-for-service (FFS) enrollees (Wells, Manning, & Benjamin, 1986), despite similar referral rates. Pediatricians diagnose mental health problems at similar rates in HMOs and in FFS, but rates in both were low relative to case findings in psychiatric interviews (Costello, 1986). The number of visits for users is lower in capitated systems (Kessler, 1984; McGuire & Fairbank, 1988). Comparing individuals with free FFS care and those randomly assigned to an HMO, the FFS system provides much more intensive therapy per user (about three times as many visits) (Miranda et al., 1994), provides more individual rather than group therapy, and is more likely to use psychotropic drugs. However, outcomes did not differ by type of payment (Wells, Manning, & Valdez, 1990). Most studies have focused on staff or group model HMOs. In a study that included individual practice associations (IPAs), Rogers, Wells, Meredith, Sturm, and Burnam (1993) found that depressed HMO patients (particularly those in IPAs) tended to acquire new limitations in role/physical functioning and decreased medications over time, while depressed FFS patients did not. Most of the existing findings relate to adults and to staff or group model HMOs. Little is known about outcomes of care or pathways to receiving care for children enrolled in HMOs, particularly IPAs and Medicaid-funded HMOs.

Understanding such pathways is critical, however, because managed care has been increasingly instituted in the nation's public mental health system. Over the previous 10 years, government cost cuts have shifted the burden of treating disturbed children to the private sector (Wolch, Kim, & Lee, 1992). Recently, an increasingly competitive insurance environment (Melnick & Lyter, 1987) has led HMOs to shift the burden back to the public sector. The effect of sector shifting on the public system of mental health care for children is not understood at this time.

Sector Shifting. Managed care refers only to services delivered in health care settings; as we noted above, most mental health services will be delivered in other sectors. In addition to shifts associated with managed care, fiscal practices of sector shifting for the delivery of care to psychiatrically disturbed youth is of fundamental concern. When policymakers think in a categorical manner, the chances that the burden for providing mental health services will shift from one public sector to another increase. For example, the state of California has recently passed a "three strikes" criminal sentencing law that requires 25-year-to-life-term incarceration after three felony convictions. Financial resources are likely to be reallocated from service sectors such as mental health, primary health care, and transportation to the criminal justice system to meet its legal responsibilities. Similarly, if a youth needs out-of-home placement for mental health problems, Los Angeles County must pay up to $3,200 per month for foster care placements. However, if the same youth has contact with the criminal justice system and then has probation violations, the youth's out-of-home placement can qualify as a criminal justice placement, and the state, not the county, will pay for the youth's placement. Instead of a $3,200/month charge, the county may only pay $50 to the state and the state will absorb the cost. In the crafting of new welfare reform laws, there is a proposed ceiling on the number of families on Aid to Families With Dependent Children (AFDC). However, there is no cap on out-of-home placements. It would not be surprising that this reward structure would be associated with increasing numbers of poor families perceiving a need for out-of-home placement (with relatives) to continue the family's ability to survive financially. The fiscal incentives for a county mental health department, county government, or state government to engage in sector shifting can be substantial.

A similar process occurs at the individual family level. If a child is certified as needing substantial intervention due to learning disabilities, a family can have the costs of such care covered by the school district, rather than the family's health insurance. This becomes particularly important as the family's insurance manages care and places limits on the maximum amount of services that can be obtained in a year. There are substantial differences in the extent to which an individual family is aware of its rights to secure services for the child. For example, Anglo parents are far more likely to

receive mental health services paid for by their children's school than are Latino or African American parents (Los Angeles County Board of Education, 1995; McAllister, 1993; Urban Strategies Council, 1992).

Ethnic Patterns. Children from different ethnic backgrounds vary dramatically in the distribution of mental health risk factors and service use (Hu, Snowden, & Jerrell, 1992; Neighbors, Jackson, Campbell, & Williams, 1989; Sue & McKinney, 1975). By the year 2000, 40% of the service delivery population will consist of ethnic minority children. Variations in use appear related to specific community settings (McAllister, 1993; Urban Strategies Council, 1992). For example, Asian and African American children in Los Angeles are on AFDC at about the same levels. However, Asian children are far less likely to use county emergency services and mental health resources (Sue & McKinney, 1975). Asian children also are far less likely to enter mental health services than their cross-ethnic peers in the same community, and when accessing care they are referred from different sources (other social service providers) compared to African American (family and friends) and Anglo, non-Latino families (legal and self-referrals) (Uehara, Takeuchi, & Smukler, 1994). Such differences are typically attributed to differences due to minority status (e.g., discrimination) and social class, although there has been little research focusing on how to examine the ways in which cultural differences influence daily expression and management of children's mental health symptoms. Three alternatives have been suggested to provide more ethnically sensitive services: (a) Increase training to existing personnel for delivering culturally sensitive services, (b) establish parallel services that are independent of mainstream organizations but similar in structure and function, and (c) provide nonparallel service organizations that have no precedence in the conventional mental health system. In general, there is support for each of these alternatives; for example, attending ethnic-specific community mental health centers is significantly more likely to result in positive behavioral changes among children who attend general community mental health centers (Uehara et al., 1994).

Child and Family Factors. Similar to the way in which families influence need for services, family circumstances affect the course

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and outcome of emotional and problem behaviors in children (Gallimore et al., 1989; Rotheram-Borus, Miller, et al., 1994). Families' response to need is to seek services. As noted above, in large urban centers, services are sought from many service sectors, and those with health problems may receive a combination of public and private care (e.g., special education at school, primary health care at an HMO, and medical FFS mental health care). The pathways among these types of services (HMO, public, FFS) and across service sectors (e.g., substance abuse, child welfare) have not been well documented for children and will shift as managed care is increasingly instituted. A child's age and gender are particularly likely to influence the pathways taken through service sectors and types of services. A 6-year-old with behavior problems may be referred for classroom behavioral management interventions, while a 16-year-old with similar behaviors is likely to have contact with the juvenile justice or substance abuse treatment sectors. Children receiving care may or may not receive appropriate treatment for some and not other needs. Which of the child's problems are addressed depends on which service sector is accessed and the integration and quality of care of the services that are provided. Variations in structural and clinical aspects of care lead to important variations in the child's health outcomes and related direct (treatment) and indirect (parents' loss of work) costs. If we are going to set national goals, we need to tailor the goals for children of different ages.

Quality of Care. The process of delivering mental health care, particularly the quality, appropriateness, and integration of care, is likely to influence the outcome of care for the child, his or her family, and society. Researchers typically assess the quality of care along two dimensions: whether a physician uses the most appropriate intervention available and the manner of physician-patient interaction (Brook, Kamberg, & Lohr, 1982)—both are understudied areas of children's services. Basic descriptive data are needed in the area of children's quality of care. While the American Psychiatric Association (1993) and American Academy of Child and Adolescent Psychiatry (1991, 1992, 1993) have outlined very general standards of care for several types of disorders, there has been little evaluation of how often appropriate care is provided or whether positive outcomes are enhanced with conditions of ap-

propriate care (Brook et al., 1982; Sailor et al., 1991). We do not know whether the most basic standards are followed for children's quality of care: For example, do children with ADHD receive appropriate medication? We have almost no data on whether children served in different sectors receive similar types and levels of mental health services. Nor do we know about subjective indexes of quality, for example, families' perceptions of satisfaction and the quality of their relationships with their mental health service providers.

Service Integration. The more problems an individual child experiences, the more mental health services the child is likely to need and the greater will be the importance of coordinating and integrating services across multiple providers in multiple sectors and types of service over time (service integration). Service integration has been a central theme within each of the service sectors (Agranoff, 1991; Beilenson, 1987; Blank et al., 1992; Center for the Study of Social Policy, 1991; Farrow & Joe, 1992; Gardner, 1992; Halpern, 1991; Kagan, Rivera, & Parker, 1991; Mordock, 1990; Ooms & Owen, 1991). While theoretically intuitive, the data that have been collected have not supported the importance of this factor for improving children's outcomes. Service integration, however, does appear to be a strategy for cutting costs of delivering mental health services. For example, Ventura County, California, has been a national leader in providing culturally sensitive, comprehensive services for children with continuity through case management and a primary focus on "integrating" mental health services for over 10 years. This strategy has appeared to cap escalating mental health costs in that county (Attkisson, Dresser, & Rosenblatt, 1991). Over time, the organization and funding of services for children at risk for mental health problems have become integrated across service sectors. For example, in Ventura County all children entering juvenile justice are screened for mental health problems and outpatient therapy is delivered in schools. While Ventura County's programs appear exemplary, the outcomes for children in these programs and untreated children have not been evaluated.

Outcomes. Outcomes define whether a mental health intervention has a positive effect on the child and family or not. Mental health services may not have a uniformly positive effect on children (Weisz, Weiss, Alicke, & Klotz, 1987). Three issues limit our ability

to detect positive outcomes in response to the mental health care being delivered in this country: (a) Care may be inadequate at many points: limited access, inappropriate evaluations, inappropriate treatment, high drop-out rates; (b) children with the most severe problems will receive the most treatment and yet are not expected to substantially improve; and (c) child outcomes are complex, including categorical and dimensional indexes of adjustment that vary with age, gender, and ethnicity (Loeber, Brinthaupt, & Green, 1990; Mrazek & Haggerty, 1994). To assess change, complex designs will be needed. The problems associated with access and the process of treatment have been reviewed above. Perhaps the most difficult issue to untangle when evaluating outcomes is that traditionally, most public funds are focused on serving a small number of youth who are in the greatest need of services. The potential improvements for this small group is often limited. More recently, communities have been adopting a variety of different strategies for improving the mental health status of the greatest number of children and families. Given that very few children receive mental health services (1%-4%) and the likelihood that many services are not likely to meet standards of appropriateness and quality of care, a wide gap has developed between the positive effect we know that programs can generate and the findings on the effectiveness of services (Weisz & Weiss, 1989; Weisz, Weiss, & Donenberg, 1992). These problems are heightened in that more than 50% of outpatients are likely to discontinue services without notice. Currently, evaluations of systems of care have not demonstrated that service delivery has a positive effect on children's mental health status (Bickman, 1996; Bickman et al., 1995). Meta-analytic studies have found that treatments for children delivered in controlled settings are highly effective (effect sizes of about .8) (Angst & Hochstrasser, 1994; Weisz et al., 1987); however, these effects are not evident in evaluations of services for children in community clinics (Offord et al., 1987; Weisz & Weiss, 1989; Weisz et al., 1992). A recent review of 19 evaluation studies found half of the current evaluations to have positive results for psychotherapeutic interventions for children with severe mental health problems in community settings (Weisz et al., 1987). However, overall, there was insufficient power in the vast majority of studies to have ever detected positive outcome. Such fundamental problems in the design of evaluations of psychotherapy create

political problems for a field attempting to demonstrate its efficacy. Rosenblatt and Attkisson (1993) have suggested that evaluations must (a) include a range of social perspectives in evaluating outcomes (client, family, social, clinician, and scientist); (b) include multiple contexts for assessment (family, school, community); and (c) cover multiple domains (clinical status, functional impairment, quality of life, safety and welfare). Evaluations will be even more complex when theoretical approaches recognize that change may be developmental (Prochaska, DiClemente, & Norcross, 1992) or phased (Howard, Lueger, Maling, & Martinovich, 1993).

Even with relatively positive data, there is a gap in the "believability" of the findings of efficacy of mental health services (Beutler & Clarkin, 1991). This gap will serve to further inhibit the nation's ability to meet the goals of *Healthy Youth 2000* (Fleming, 1996). Increasingly, psychotherapy and psychotherapy research are being held financially and politically accountable, and national and independent health care systems may not cover psychotherapy unless there are demonstrated favorable outcomes (Lambert, 1991). If this were to become a reality, it will be impossible to meet the goals of *Healthy Youth 2000*. It is imperative that we mount rigorous evaluations with sufficient power to detect differences in outcomes of children's mental health services.

Recommendations

Interventions to Assist in Achieving *Healthy People 2010* Goals

Given this review, recommendations for improving the targeted goals for *Healthy People 2010* fall in three major categories: (a) improving the transfer of technology for delivering psychotherapeutic interventions in community-based settings; (b) questioning the current models of delivering psychotherapy by practitioners who are generalists; and (c) examining alternative financing structures for the delivery of care within primary health care, education, and other sectors.

Technology transfer in the context of this chapter refers to the dissemination of innovative and effective psychotherapeutic

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child interventions in community-based settings. As noted above, most child-focused interventions that have been tested for efficacy generate effect sizes in the range of .3 to .45 (Weisz & Weiss, 1989). However, such effects are not generated in the field settings, that is, the average mental health setting in a local community. In community settings, however, the typical practitioner delivers a psychodynamic, eclectic intervention strategy, while almost all therapies delivered in a research setting are cognitive-behavioral in orientation and delivery. Every research-based intervention is guided by an extensive manual, provides substantial training and monitoring to the therapists, and uses relatively new intervention agency. Research-based studies are not typically delivered by therapists with a caseload of 80 clients, nor do clinical providers receive supervision on a weekly basis for each of their clients.

To secure results similar to those demonstrated in research settings, substantial changes must be implemented in the delivery of mental health care. First, the next generation of therapists must be taught that the affective state of the client during therapy is not an outcome. The targeted outcomes are performance based and only relevant if demonstrated outside of the therapy hour and following the delivery of the intervention. Second, broad-scale dissemination of manualized interventions with demonstrated positive outcomes must occur. Each federal agency (National Institute of Mental Health; National Institute of Allergies and Infectious Diseases; National Institute of Child Health and Human Development; Centers for Disease Control and Prevention; Association for Children, Youth and Families) must undertake the dissemination of programs with demonstrated efficacy. Currently, successful research programs are typically funded from 3 to 5 years and there is no incentive for the research team to disseminate their findings. Third, systems for monitoring the delivery of services must be set at the local level. While there can be substantial variation in how outcomes are monitored, the existence of a monitoring system is fundamental to achieving *Healthy People 2010* goals.

With such revisions, the fundamental staffing and training systems for mental health services must be reconsidered. The field of developmental disabilities shifted many years ago to training paraprofessionals to deliver specific interventions: toilet training, table manners, job interviewing, keeping a checkbook. Many developmentally linked problems do not require extensive intervention (e.g., bedwetting, reactive depressive disorders), but require specialization from a paraprofessional trained in the theory, techniques, and evaluation of the specific disorder. The shift from mental health to primary health care settings for the delivery of care creates the opportunity to begin to identify specific, time-limited interventions for children. A specialist for children with attention deficit disorder could be trained and deliver group-based services to several groups of 8 to 10 children several times a week. This would be likely to result in higher-quality services to youth in need.

Financing structures offer the greatest potential source for reshaping and/or improving the delivery of care. Whether nationally programmed interventions proceed or not, change is occurring rapidly at the local level. States are shifting publicly insured children to managed care programs; the role and level of mental health funding within these programs is yet undetermined. The only advocacy programs to date have been in the area of a mandated option for hospitalization following childbirth. Historically, the National Community Mental Health Association has lobbied most effectively for the severely mentally ill, autistic children, and schizophrenic children. These priorities must be examined in the context of improving the overall health of the community. Identifying potential trade-offs in funding the most severely disabled versus the general population at risk must be examined in a public forum so that priorities can be set.

Strategy to Set Goals for 2010

To set realistic, achievable goals for *Healthy People 2010*, three strategies are suggested for setting the goals: (a) Set goals for communities, rather than at the national levels for specific individuals; (b) set up a national surveillance system to monitor implementation of the goals on an annual basis; and (c) establish an incentive system and a method for automatic intervention when communities fail to achieve targeted goals so that progress will be made toward the targeted outcomes.

Rather than setting national goals, community-level goals may be more appropriate. Mental health services are delivered at the local level, and the complexities and history of the local system will influence each community's ability to reduce the need and unmet

need in its local context. As outlined in the theoretical model in Figure 5.2, there are community-level outcomes that are a function of the structural factors, as well as reflections of the service delivery network (specific agencies and office-based practices). Paralleling the movement for national funding of HIV programs (e.g., Bowen et al., 1992; McKinney, Wieland, Bowen, Goosby, & Marconi, 1993), local planning councils and counties could be made accountable for the design and implementation of the local system of care. Linking funding to the delivery of community-level outcomes will provide incentive to local communities to improve their delivery system. With the mounting social problems of inner cities, it will not be possible for us to meet national goals at the same level for all children. As with income, it is possible to have a large subgroup of the middle class whose functioning and mental health status improves, but with a greater gap between the adjustment of the privileged youth in contrast to those at greater disadvantage. This was precisely the situation in the level of substance use in the early 1980s. Substance use was declining nationally; however, admissions to emergency rooms for drug overdoses was rising dramatically, and a far greater percentage of minority youth were using high levels of drugs. To decrease the gap between disenfranchised and middle-class youth, community targets and outcomes would offer an advantage.

Paradoxically, when local control is given to communities, it is critical to establish a national monitoring system. A prime example of this strategy has been the program of the Division of Adolescent and School Health of the Centers for Disease Control and Prevention (CDC, 1995). Over the past 6 years, a system for monitoring sexual-risk acts of the nation's youth has been established. While this system took several years to implement, within 7 years, more than 85% of communities will have participated in the CDC survey. Two years ago, the same division initiated a system for monitoring school districts' implementation of HIV prevention. When setting national goals, the surveillance mechanism must be established several years in advance of the targeted goal to monitor the nation's progress. In the midcourse correction for the year 2000 goals, Fleming (1996) looks to the National Institute of Mental Health UNOCCAP study that is currently in progress to monitor the nation's ability to meet its mental health goals. There is no ongoing surveillance system established for monitoring mental health outcomes, similar to those established for AIDS by the CDC, substance use (National Institute on Drug Abuse), or health (National Institutes of Health). If UNOCCAP is to provide the base rate for the mental health status of the nation's children, perhaps this survey should be established as the ongoing surveillance system for mental health outcomes.

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Communities will have great problems in meeting the challenge of achieving national goals for children's positive health outcomes. Some communities will demonstrate such massive failures in achieving the goals that a national intervention policy must be established. Currently, the federal government is funding empowerment zones for a set of inner cities believed to need significant, radical interventions to provide for the health of their community members. Simultaneously, the CDC is experimenting with a strategy of designing fiscal incentives for achieving health goals. For example, with the recognition that taking zidovudine during pregnancy has a positive effect on lowering the probability of HIV transmissions to newborns (CDC, 1994), Congress has given each state until the year 2000 to ensure either that the rate of HIV/AIDS among newborns decreases by 50% or that 95% of pregnant women are voluntarily tested for HIV. If neither of these targets is met, the state runs the risk of losing HIV funding, and a potential policy of mandatory testing of newborns will be revisited (Dewar, 1996). While controversial, a threshold must be set for identifying communities where the majority of children are at severe risk for negative mental health outcomes. A process of identifying and implementing community intervention strategies that are automatically triggered when a substantial percentage of the population is identified at high risk will be needed to ensure that national mental health outcomes are achieved.

Summary

To improve the nation's health, policymakers are faced with multiple challenges. To be able to set the goals for 2010, plans must be designed immediately to identify the level at which the goals will be defined, implement national monitoring systems, and identify strategies for inducing communities to provide for the health and mental health of their citizens. With these tools in hand, addressing the dissemination, training, and financing of mental health care at

the local level will be likely to improve our chances of meeting our mental health goals by the year 2010.

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